

Designing a Successful Practice-Based Research Network in Public Health: Key Concepts

Successful public health practice-based research networks (PBRNs) will require organizational, financial, and intellectual resources that allow practitioners and researchers to mount studies in real-world public health settings. The following characteristics are expected to be important to the success of public health PBRNs, based on the experience of PBRNs in other practice settings.

Geographic Scope

Public health PBRNs may find it beneficial to organize around members that serve a common geographic area such as a single state or collection of neighboring states. Along with the benefits of proximity, this regional focus allows for some degree of commonality in the geographic, cultural, demographic, economic, political, and/or environmental conditions facing network members and the communities they serve—thereby facilitating decision-making on research priorities. Networks may choose to span two or more states where feasible, in order to allow for some within-network variation in state organizational and policy context, thereby increasing opportunities for comparative research and natural experiments on policy change.

Membership Size and Type

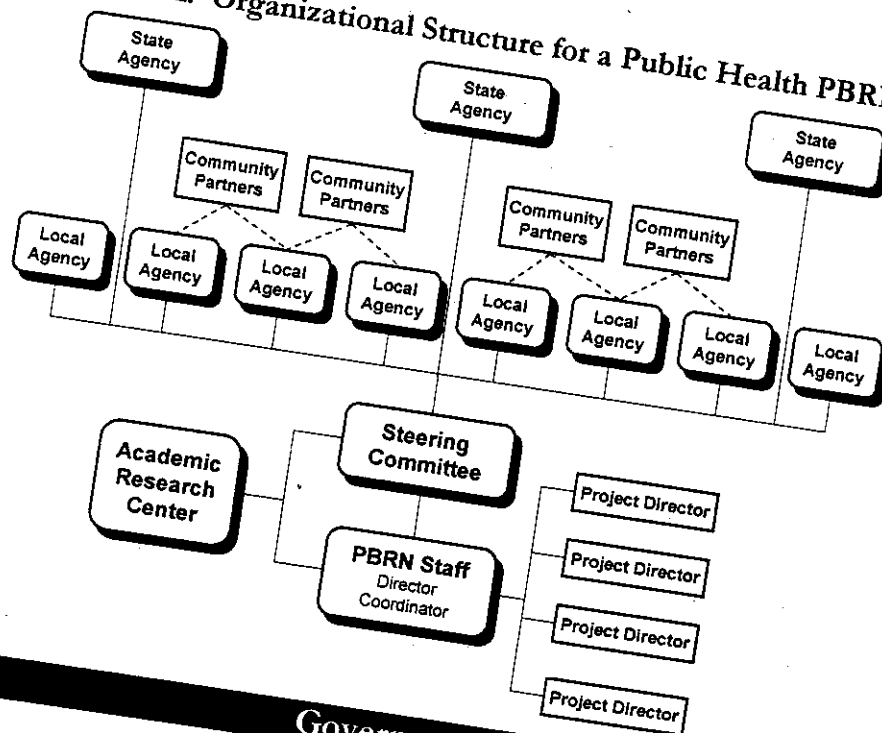
A public health PBRN should include both state and local governmental public health agencies as members, and allow for more members as this becomes feasible. Many of the public health programs and policies to be studied through PBRNs will be implemented at the local-agency level, and will require sufficient numbers of agencies to serve as intervention and comparison sites. In some cases, it may be feasible to include large numbers of agencies in a single network if local agencies are organized within a larger regional or statewide system that facilitates communication and coordination across agencies.

Local governmental public health agencies are likely to be the most prevalent type of member in most networks, but networks should also include **state public health agencies** in their region as members wherever possible. Additionally, PBRN members should involve their **community partners** in specific research projects that address topics of relevance to these partners. All networks must include an **academic research center or institute** that offers methodological expertise in research design, data collection, and data analysis along with experience in applying these skills in applied public health research studies or closely related types of research.

Organizational Structure

A PBRN network should identify one of their member public health agencies to serve as the lead sponsoring organization, providing an institutional home for the network (Figure 1). The PBRN director and key staff will be based at this sponsoring institution. This institution will establish and maintain formal relationships with all other organizational members.

Figure 1: Organizational Structure for a Public Health PBRN



Governance

PBRNs require a steering committee to establish strategic direction for the network, make decisions regarding research priorities, and oversee the quality and integrity of the research process. Committee members may be appointed or elected by the organizations that comprise the network membership. Networks should include representatives from research centers, public health agencies, and community organizations on their steering committees, and should maintain diversity in membership with respect to professional, organizational, and personal background.

Staffing

Each public health PBRN will require a director who is responsible for day-to-day network management, including communications and outreach activities with member organizations, personnel and financial management duties, and quality assurance processes for research projects. Each network will also require a network coordinator to perform an array of central operations, including maintaining data resources, coordinating the work flow of specific research projects, and developing and implementing research protocols. Individual research projects will be managed by designated project directors who will maintain reporting relationships with the network director. Senior faculty and staff from member institutions will serve as project directors.

Research Liaisons

Each participating member of a public health PBRN will designate a research liaison to serve as the agency's primary point of contact for the PBRN, and to facilitate the agency's active involvement in research activities. Each PBRN director and coordinator will hold monthly conference calls with agency liaisons and research project directors to update members on ongoing research progress, discuss problems and potential solutions in research operations, identify new research ideas, and review potential funding opportunities.

Financial Resources

Public health PBRNs will receive an annual allotment of start-up funds to cover the costs of core staff and materials required for initial research activities. Networks are expected to leverage these start-up funds by using their initial research activities to generate preliminary data and findings that will lead to competitive applications for additional extramural funding for larger research projects. Funding opportunities for PBRN-sponsored research projects exist in multiple sources, including the RWJF-supported research programs, federal research programs at CDC and NIH, state government agencies, and other foundation and nonprofit grant-makers.

Information Technology and Data Resources

PBRN will require processes for collecting and exchanging data among network members for use in research studies. Each network must identify the range of available data sources to be used in collaborative research, and establish HIPAA-compliant data use agreements and ensure that all research staff have adequate training in data security procedures. Existing data sources to be used in PBRN research may include birth and death records, reportable disease surveillance systems, cancer and other disease registries, and data from administrative records.

Communication and Decision-Making Processes

Public health PBRNs will establish multiple communication mechanisms that allow public health agencies and researchers to exchange information about research ideas, funding opportunities, interpretation of findings, and implications for practice. These mechanisms include a dedicated website, print and electronic newsletters, an electronic listserv, monthly conference calls, and an annual meeting.

Research Focus Areas

Each PBRN should identify a specific set of research issues and questions on which their network will focus initially. These issues should be consistent with the skills and experiences of proposed network members and with the context and environment in which these members practice. Initial studies may seek to characterize the scope or nature of the problem across network sites, identify causal pathways, or test improvement strategies. Research issues should reflect issues of high importance and relevance for the field of public health practice, such as those involving public health workforce issues, financing methods, organizational and governance structures, public health law and policy, and/or quality improvement initiatives.

Technical Assistance

The National Coordinating Center will provide technical assistance and support to emerging public health PBRNs through a number of different mechanisms, including printable guidance documents and briefs, quarterly video and web-cast training sessions, annual conferences, monthly conference calls, a telephone helpline, and customized consultation through an allotment 10 days of expert technical assistance per network. Each network will develop an inventory of their technical assistance needs in order to determine how best to utilize these resources.